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Particle Flow Calorimetry for the ILC

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The Particle Flow approach to detector design is seen as the best way to achieve dijet mass resolutions suitable for the precision measurements anticipated at a future e^+e^- Linear Collider (LC). Particle Flow Algorithms (PFAs) affect not only the way data is analyzed, but are necessary and crucial elements used even in initial stages of detector design. In particular, the Calorimeter design parameters are almost entirely dependent on the optimized performance of the PFA. Use of PFAs imposes constraints on the granularity and segmentation of the readout cells, the choices of absorber and active media, and overall detector parameters such as the strength of the B-field, magnet bore, hermeticity, etc. PFAs must be flexible and modular in order to evaluate many detector models in simulation. The influence of PFA development on calorimetry is presented here with particular emphasis on results from the use of PFAs on several LC detector models.